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Recovery of continuous field of ecological-climatic indices based on the meteorological stations data

Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

© Published under licence by IOP Publishing Ltd. The possibility of using INLA (Integrated Nested Laplace Approximations) method for the recovery of continuous field of ecological-climatic indices based on the meteorological stations data has been considered and the accuracy of such recovery assessed. Meteorological data from 13 stations were used to fit INLA model, and independent data from 58 stations were used to test the model. Traditional ecological-climatic indices were modelled (annual sum of effective temperatures, mean annual temperature, mean temperature of the coldest and the warmest month within a year). All indices show good compliance of the model predictions and data test (R2 in range 0.70-0.90).

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